

CLAIMS

1        1. A grid array signal conducting arrangement comprising at least one differential grid array  
2 conductor pair and at least one non-differential grid array conductor pair, the at least one differential  
3 grid array conductor pair having portions thereof which are more closely spaced in comparison to a  
4 spacing of corresponding components in the at least one non-differential grid array conductor pair.

1        2. A grid array signal conducting arrangement as claimed in claim 1, where the grid array  
2 signal conducting arrangement is provided in a grid array connector provided on at least one of a  
3 receiving substrate and a semiconductor package.

1        3. A grid array signal conducting arrangement as claimed in claim 1, where the grid array  
2 signal conducting arrangement conducts at least one differential pair signal.

1        4. A grid array signal conducting arrangement as claimed in claim 3, where the grid array  
2 signal conducting arrangement provides at least one of greater coupling and greater common noise  
3 between the differential grid array conductor pair than the non-differential grid array conductor pair.

1        5. A grid array signal conducting arrangement comprising:  
2 at least one differential grid array conductor pair and at least one non-differential grid array  
3 conductor pair; and  
4 means for providing noise rejection capability in the grid array signal conducting  
5 arrangement.

1        6. A grid array signal conducting arrangement as claimed in claim 5, where the grid array  
2        signal conducting arrangement is provided in a grid array connector provided on at least one of a  
3        receiving substrate and a semiconductor package.

1        7. A grid array signal conducting arrangement as claimed in claim 5, where the grid array  
2        signal conducting arrangement conducts at least one differential pair signal.

1        8. A grid array signal conducting arrangement as claimed in claim 7, where the grid array  
2        signal conducting arrangement provides at least one of greater coupling and greater common noise  
3        between the differential grid array conductor pair than the non-differential grid array conductor pair

1        9. An electrical component comprising:  
2        at least one of a receiving substrate and a semiconductor package; and  
3        a grid array signal conducting arrangement comprising at least one differential grid array  
4        conductor pair and at least one non-differential grid array conductor pair, the at least one differential  
5        grid array conductor pair having portions thereof which are more closely spaced in comparison to a  
6        spacing of corresponding components in the at least one non-differential grid array conductor pair.

1        10. An electrical component as claimed in claim 9, where the grid array signal conducting  
2        arrangement conducts at least one differential pair signal.

1        11. An electrical component as claimed in claim 10, where the grid array signal conducting  
2        arrangement provides at least one of greater coupling and greater common noise between the

3 differential grid array conductor pair than the non-differential grid array conductor pair.

1 12. A mounted electrical component arrangement comprising:

2 a plurality of electrical components; and

3 a grid array signal conducting arrangement comprising at least one differential grid array  
4 conductor pair and at least one non-differential grid array conductor pair, the at least one differential  
5 grid array conductor pair having portions thereof which are more closely spaced in comparison to a  
6 spacing of corresponding components in the at least one non-differential grid array conductor pair.

1 13. A mounted electrical component arrangement as claimed in claim 12, where the grid array  
2 signal conducting arrangement is provided in a grid array connector provided on at least one of a  
3 receiving substrate and a semiconductor package.

1 14. A mounted electrical component arrangement as claimed in claim 12, where the grid array  
2 signal conducting arrangement conducts at least one differential pair signal.

1 15. A mounted electrical component arrangement as claimed in claim 14, where the grid array  
2 signal conducting arrangement provides at least one of greater coupling and greater common noise  
3 between the differential grid array conductor pair than the non-differential grid array conductor pa

1 16. A method of increasing noise rejection capability of a grid array signal conducting  
2 arrangement comprising:  
3 orientating electrical conductive parts in the grid array signal conducting arrangement that

- 4   conduct differential signals so as coupling distance between at least one pair of differential signals  
5   is less than coupling distance between at least one pair of non-differential signals; and  
6       conducting at least one pair of differential signals through the electrical conductive parts.

- 1       17. A method as claimed in claim 16, where the grid array signal conducting arrangement is  
2   provided in a grid array connector provided on at least one of a receiving substrate and a  
3   semiconductor package.